

Still Alive With Sir Clive!

ZXir QLive Alive!

The Timex/Sinclair North American User Groups Newsletter

Volume 9 No. 1

Spring '99

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Alpine River, Colorado

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Established 1991 The Timex/Sinclair North American User Groups Newsletter

T/SNUG Information

We wish to support the following platforms: 233-8091, 75-1000, Spectrum, T3-2000, 285 and QL. If you have any questions about any of these five Sinclair, contact the

Chairman

Chief Moderator
Donald S. Lambert (233/23)

Vice-Chairmen

Types & IL0 PD Library
D G Smith
413 Shaw St
Palmerton, PA 19360
610 938-8998

Z88 Library
Dave Bennett (HAT5UG)
1275 Timber View Dr
Middletown, PA 17055-1146
717 732-4394

QL Hacker's Journal

Timothy Swenson
2455 Medillon Dr
Union City, CA 94587-1914
swensonst@pacbell.com

TS-2000
Real Humphreys (VSUG)
10944 Collins Pl
Delta, BC V4C 7G5 Canada
604 383-2139

QL PD Library

John Davidson (CATUG)
431 Forewood Cir
Geneva, IL 60134-1631
630 232-6147

AERCO & Z80 Simulator

Kath Watson
49324 Ambery Dr
Mt. Clemens, MI 48038

BBS ---GATC8---

Bob Swager (CATUG)
613 Parkside Cir
Stratford, IL 60157-1647
630 837-7587 Fax 647 336-8068

Any of the above can also be reached by E-Mail through the Club BBS 847 632-3558

ZXir QLive Alive!

In the newsletter of TSNUG, the Times/Sinclair North American User Groups, providing news and software support to the TS community in a **VOLUME** of four newsletters per year, beginning with the Spring (March) issue.

TSNUG's main goal is to preserve and encourage the use of Sinclair computers by providing an open forum for the exchange of knowledge, building and maintaining of software libraries. Providing vendors, repair service and members with free ad space.

It is the user groups and individual subscribers, rather than the vendors, that provide the primary support for this newsletter. Vendors and developers receive the newsletter free of charge, though contributions from vendors and user groups is gratefully accepted. Please support our vendors and service providers whenever possible.

If you have a problem or you have solved a problem, please share it with the rest of us. No problem will be considered unsupportable.

Editor, Treasure Publisher

You can keep TSNUG alive by be an annual contributor of \$12 for one **VOLUME** made payable to Alad Kahala. Send check to:

ALAD KAHALA
3343 S FLAT ROCK CT
SIERRA VISTA, AZ 85660-0674
520 376-3428

Rock copies are available for \$1.00 each postpaid.

TrenSury Notes

As of March 1, 1999, we have a balance of 1985.78

Article Contributions

Send us your articles by tape or disk and your input to --

DONALD S. LAMBERT
1301 KUBLINGER PL
AUBURN IN 46708-3010
Phone 219 925-1372

By hardcopy, e-mail or modem (24x7) to
Alad Kahala

E-mail: AlKahala@compuserve.com

GATOR's Twisted Pair

To better inform the Sinclair Community, four 24-hour a-day BBSs are now provided to serve you. You are encouraged to exchange mail and use the files sections of these boards.

Bulletins and ads are available to all

Q-Box BBS 810 254-9878

Utica, Michigan

MOI BBS 520 682-4388

Tucson, Arizona

Club BBS 847 632-3558

Arlington Heights, Illinois

WebPage

<http://users.aol.com/dubbs/tsnug/>

If you know the Internet E-Mail address of a Sinclair user, but do not have access to Internet, simply address your E-Mail to GATOR. Either on the 24-hour Club BBS and include the name and E-Mail address of the user you wish to reach. Then about the Club BBS from time to time if you expect a reply.

When exchanging you to exchange mail and contribute to the **UPLOAD** section. Call and register using your first, last name and phone number along with a password you won't forget. *Write & download!* Do not try to do anything else at the time.

When you call-in the next time, you will have Level 5 security and be able to enjoy full user privileges. The BBS has smaller sections called subboards. Select "1" for "Join a Conference" Select "TRENDS" to go into the Reader Section. The mail you then read will only be from other TS users. Use subboard ART for articles, ADS for ads and NWS for news when **UPLOADING**.

For help, contact the SYSGOP, Alad Kahala, by leaving a message, mail, E-Mail or phone CSNG18@jazzmail.net call

Input/Output

by *Abel Kahala*

My Email address is actually EdK4@net.com, not EKA, as currently listed.

I am again the editor of the NESQLUG News, and the listing for an should read: (Under NESQLUG News, New England Reader User Group)

Ed Kingsley, Editor
18 Highland Avenue
Saugus, MA 01806

(781) 233-3071 EdK4@aol.com

Note that my title code has been changed from 617 to 781. Many thanks.

We are trying a new approach, courtesy of Al Boehlen. His son Bill has put up a web page, upon which we will post the bi-monthly newsletter for NESQLUG members. Email Membership will be a mere \$3 a year. Those wishing a hard copy will still subscribe for the regular rate of \$10/year. All articles for publication will be sent first to me, and I will forward them to Al.

Thanks for all your help, and also for not being there. Sincerely grateful.

Ed Kingsley

Subject: New Web Site and Show X-URL
http://www.net.com/cda/links/ug/

Checked out your new web page. I am glad to see new TS stuff on the net. We will add a link to you from the NESQLUG WebPages as soon as possible.

The notice mentions the dual East Coast/ West Coast show. As far as I know the East Coast show is set for New Jersey. Below is the notice for the show. If there is a group sponsoring a show in Pennsylvania, they should contact me as soon as possible so that the site can be revised.

Frank Davey had sent me a small mentioning a possible

Pennsylvania site, but when I contacted him back about offering discussion, he became quite curt, stated he was leaving the Reader scene, and requesting that I not contact him.

I checked carefully my messages to Frank and could not find anything that would incite such a reaction. However, recently, I have heard that there was harsh discussion between Bill Cable and Frank in which my name was mentioned. But I know nothing of this!

A draft of the below announcement was coordinated with Tim Swanson before it was released. It greatly saddens me to see discussion among users of the same computer forum. Anything you can do to heal this hurt is most heartily appreciated. If you should have contact with Frank, please tell him that I hold him in my highest regard. God bless,

Al Boehlen

boehlen@juplink.com

Due to lack of interest the SCC server is down since it does not seem to generate enough interest. I will be using this b.d. space for other topics... as of now it is shut down...

Thank you,

Joey Marano

http://www.net.com/cda/links/ug/br
Remove it from SCCM

ERRATA

Recent Listings

Hello Abel...

I received my copy of EKA QLove Alive! yesterday and was glad to see my program and comments in print. I hope they will be of use to readers and will encourage present programming using the Times/Reader Show or

the EX Spectrum reader.

I would have preferred that you have contacted me before changing the program listings in an effort to make the

US QL-East Coast Show 29-30 May
The show will be at Wesley Hall, St. Andrews United Methodist Church, in Spring Lake, NJ, about 60 miles south of New York City. QL-East will include vendors, work shops, and some interesting tutorials by Bill Cable, Herb Schaub, and Samer Gachwa. The show includes other Reader computers, TS-2068, EX-81, etc. A block of 20 rooms are available at Budget Inn, Tel 732-775-7344.

To obtain the show rate of \$50 per night for 1 or 2 people for Friday and Saturday, mention the QL Show and make reservations by 1 March.

Spring Lake is a beautiful resort area about 75 minutes from airports at Newark, Atlantic City, or Philadelphia. It's about 2 hours from JFK airport.

Local information including (probably free) transportation from JFK, can be obtained from Local Host — Bill McKelvey
mckelvey@delphi.com

Agenda: Friday night 6 PM till dinner at Cobblestone Restaurant. Saturday 9 AM to 4 PM Vendors, Tutorials, and Workshops. Fee per family is \$30 if paid by 1 May, \$12 at door. Fee includes light lunch and coffee/tea throughout the day. Sat. Eve. 6-9 PM Banquet, panel discussion, and entertainment. \$20 per person. Late nighters retreat to bar and Grill. Sunday 11 AM at McKelvey's home there will be additional tutorials and informal discussions.

Includes light lunch and beverages free.

Pay advance fee to show treasurer.

Bob Malloy

412 Pacific St.

Hempstead Park, NY 11762

Overseas attendees may obtain advance rate by writing Bob

malloy@aol.net

and paying after arrival.

Questions about the agenda should be addressed to Al Boehlen
boehlen@juplink.net. Updates will be added to the NESQLUG web page
http://www.net.com/cda/

Note there is also a QL West Coast Show the following weekend. The East Coast nationals will be video taped and available for viewing at this show.

Settings more aesthetically, you removed some critical punctuation which will make it difficult for anyone trying to type in and run the programs. The most notable deletions were the curly brackets ({}) around comments. Pascal, (only the "P" needs to be capitalized), treats everything between curly brackets like one large RFM statement. The other serious omission is the first line of the telephone directory program.

PROGRAM TelephoneDirectory.

{ - Start a remark

Purpose

This program creates a small telephone directory ... etc
End a remark -}

CONST

MaxLen = 32, {Maximum length for the "string"}

I think that most people who have experience in Pascal will make the corrections on their own. The changes just throw a monkey wrench into things that I took so much time and effort to ensure that they were correct. Next time will be better.

I have a new computer now a Pentium II, 400. Unfortunately, it will not allow me to use the ZX Spectrum emulator until I upgrade QLive. I am up and running, I will be writing more programs in Turbo Pascal. I would still like to publish them in ZXr QLive Alive! if we can come to some sort of an agreement on format. In the mean time, perhaps you could make the listings -- as I sent them to you -- available from your web site.

Hope to hear from you soon,

David Solly "dcs15@compuserve.net"

Sender: F.Liebert@t-online.de

Date: ZX-42 forum!

Here you will get some new ZX-41 information. 3rd ZX-41 users meeting from 16 to 28 march 99 ZX-41 users will meet at Dattgen near Pöhl in the heart of Germany YOU are invited to come!!

More information see ZX-TEAM-Homepage under "messages" URL see signature ZX-41 Web-Ring. Banded! (English only)

Very new but already with a lot of information, URL see signature

You can find ZX-41-mailing list archives with the first 150 mails from October 95 to July 97, more will come soon. Biggest ZX-41 users group besides ZX-TEAM. Its simple and free to join, see WWW-page at ZX-41-Web-Ring site.

Looking forward to hearing from you

your "sincerely" Peter

ZX-TEAM-Homepage:

<http://home.t-online.de/home/lebert@zx-team.htm>

ZX-41-Web-Ring

http://home.t-online.de/home/lebert_zx41_who.htm

Peter Liebert-Solly

Subject Re: ZX-4000 web wid.

Hi Alad,

I found the following in the internet users group comp.sys.zenith

ZXr QLive Alive!

Looks like Uncle Clive is coming out with a new computer (ZX-2000). I find a very interesting Clive is jumping back into the PC arena.

I've had all of his systems. If anyone has a source of other articles, that can be mailed or sent on the web please send it to me or post it. Thank u

<http://www.cobolnet.co.uk/zx2000/live.html>

Take care,

Jack Newright

Clive Reveals the ZX2000!

(typed by Craig Redwood & © Frontier Magazine)

I want to design another computer because I think I can make a decent job of it

I've started work on a prototype already. It's a computer to fit the PC because the modern desktop computer is about as bad as design is possible. It really is appalling. It wastes memory on an unbelievable scale and it slows down to extremely fast CPU with cumbersome routines and programs. I think there's huge room for improvement. I want to create a computer that's completely portable, but also totally functional so there's no compromise. I want something that is going to cost 10 times less than a current notebook PC and have a huge battery life so you won't have to keep recharging that thing.

The trick is to get the power consumption so low that you just stick in a couple of batteries and replace them a month later. I've been spending a lot of time looking at display technology, because that's one element that I haven't got. I need a very good, low cost display. I think I know how to do it, but it is a terrific amount of technology that I'm working on that very hard at the moment. In order to do the sort of computer I want it has got to be very very low power.

We designed our own CPU and its an extremely high performance one, we had prototypes of it sometime ago and its blazingly fast. About 10 times faster than a P2. It would have to be manufactured using a specially developed semi conductor process. I've been talking to a company in this country and were at a fairly advance stage.

It's an ultra RISC chip, which has as this word, and it has 16 principal instructions.

I don't want to go into too much technical detail or bombard you with jargon, but this little thingy will be *incredibly fast and very efficient.*

From: Jeff Barrett <jbarrett@prodcomad.com>

To: <skhalo@compuserve.com>

I am in the process of trying to get my 2000 repaired (some hardware backing with a Motorola modem module damaged the SCSI). Assuming that repair can be completed or that I can get a replacement (any suggestions?) I would be interested in learning who is currently playing with this machine. I am an electronics engineer with experience in design and construction of computer controlled medical data acquisition systems and would be interested in hardware/software projects. In the near term I would like to try (if not already done) interfacing an IDE hard drive and Zip drive to a 2000.

First the bad news, SCLDs are *not* available. These chips were never made available by Texas. Your best bet is to acquire another 2068, they are still available. Contact Jay Shepard
 << jhshepard@prodigy.net >> (his answers has e-mail on weekends)

I am glad to learn that someone is still experimenting with the 2068. Unfortunately I don't know of anyone else who is still processing the old horse. Whatever insight you could provide about your experimentation will be most welcomed for including in the DOR QLive Alive! Newsletter. Aloud

From: Jeff Barrell <jbarrell@earthlink.com>

Thanks much for the info. I have contacted Mr. Shepard about a new 2068. Here's hoping. In the mean time I'm resurrecting my TS-1000 and an old C&D interface module to start my DOR project.

As a question, Would it make sense to try to reverse engineer the SCLD on the 2068 and replace it with a modern GAL20K64A? I realize that it would require adapting the new device present to match the old SCLD pinout. Would there be a market for this or have the machines with bad SCLDs been trashed?

I have now just found out what I have been missing in the Sinclair area. The Z88 sounds like a nice machine and it seems that I have missed FWD Computing's offerings. Knew who might be selling what inventory there is left! I would be very interested in acquiring a working QL, as well. It would be nice to have one each of Clive's US branch-chips.

This is a very ambitious project, wish you luck if my memory serves me right, the SCLD is the Home' ROM, BASIC ROM and Extension ROM in one chip. In other words it is the brains of the 2068. Times reserved all the rights to its design back then...

There wouldn't be much of a market for it at this time since almost everyone is using an emulator in their PCs instead of a physical 2068.

Don Elliot of Computer Classics is one who can use the SCLDs.

Please provide your email and address, I will mail you a copy of our Newsletter. Aloud

Mr. Kishin,

I got your name from Rod Gowers, as he says, he is no longer able to continue his business, he referred me to you. A Couple of years ago I purchased a copy of Don Lambert's LaKerK Disk Utility. Unfortunately, I did not make enough copies. When my working copy became corrupted, I went to my backup copy too soon. It was corrupted too. I have been able to get a copy of an earlier version, but am spoiled by version 3.0.

If you still use the Times/Shepard 2068 and if you have a copy of DOS version 5.0, I would sure appreciate a copy. I use the LaKerK software with LaKerK DOS cartridge and 3 1/2 disk drives (2 side/40 track).

If you are able to do me this favor, please advise by return mail any cost (discretion/postage etc) you may incur. If you are short on diskettes, I would be happy to send you a couple. My Manual on Disk has survived, as I only used the one disk with the program on it.

Don O'Brien
 5 Matthew Ct

Annapolis MD 20310-8126

Z88 QLive Alive!

Hi Aloud,

The same gentleman has written me for this software. According to Rod Gowers it doesn't exist. The only version I have is 2.0 and Rod says that to the best of his knowledge, that is the latest version. I have already sent this to Mr. O'Brien. He sent a back saying it wasn't the one he needed. I have version 3.0 on both tape and disk.

Jack Boatwright

Aloud,

My O'Brien is not on-line, so doesn't have an email address. He had contacted me a couple months ago about this. I was going by what Rod said and didn't know there were later versions or I would have contacted you or Rod. Maybe I should get the later version for the future, though.

Take care,

Jack Boatwright

Dear Aloud,

I don't do much on the DOS equipment any more, but still enjoy your fine Newsletter which I read fully from cover to cover. Congratulations on a great Winter edition. I look forward to every issue, Secondly,

Earl Kniglass

Thank you Earl!

Aloud,

Did I tell you that I got one of the 2068s going finally? Must have been one of those days when I did something right, but I'm not sure what it was. Anyway, I have the LaKerK hooked up and running now!! Very cool! Seems to be working just fine. I installed the RAMdisk and it's working too!

< Connectors, connectors is what I tell everyone having problems with the 2068. Just straight them and re-plug them several times and that should cure the problems.

It may have been connectors, but I was switching chips back and forth when it started working. I did not. I'll send me another one anyway... I need a backup. I thought I had one somewhere but have not been able to find it. I can't figure out where it went, maybe I have gremlins.

I was in Portland for a work conference this week so had a chance to see Rod and we had dinner together Wednesday night. Had a good time and enjoyed the visit. He's doing well <

> That was nice. How is his dysynapt?>

The dysynapt is going now. It's sad, but he seems to have decided it's not going to keep him from enjoying what he wants to do. He is a very upbeat person and a joy to visit with. I hope to continue our friendship and visit him occasionally.

Jack Boatwright

>Hello Jeff,

>I forgot to mention that someone did reverse engineer the SCLD several years ago. He was talked out of it because of the legal aspects. Though I don't believe that Times would prosecute some 20 years later.

Patents rights do expire after a certain time had elapsed.

Aloud,

Thanks for the info on the SCLD. I don't know if Times would be able to enforce a patent issue (18 years later at that) if the replacement was developed in a clean-room environment, but.

An any case, it is too bad that there are no live hardware

hardware out there. An emulator is OK (I use them when necessary) but there is something about the smell of burning solder and the occasional burning IC, and sound of cranking peripheral drivers that makes playing with the real hardware so much more fun.

Jeff Barwell

How well / Any?

Dear Alasd,

I saw TSMUG web page, Nice Work.
I want to thank everyone who contributes. Once I finish my Computer Science degree, I will have time to work with my Sinclair and hopefully contribute some fantastic new program or hardware.

Due to many problems concerning email, my email address has changed, it is now <tdell@comp.siu.edu>.

Thank you

Ken Barbin

Hello Gino,

I was 'talking' with Al Barbin about having some Classic Sinclair users at the show. He asked if I could find people interested. I thought of contacting you first. You are involved with 2 different groups.

We would like to have people familiar with the other Sinclair computers, ZX-40, ZX-41/TS-1000, TS-2068 /Spectrum, as well as the peripherals that go with them. If you know of emulator users that is a good too.

The show will be in Spring Lake, MI. The full details are on www.sinet.net/sinclair/index.html.

Please forward any interested parties to myself.

<kenbarby@jcdelta.com> or <kenbar@dylink.net> Thanks,
Bill McKelvey

Hi there,

Found your name in Daga News. I have a TS-2068 I'm trying to play with. Is TSMUG still around? How might they be contacted? What do they have to offer? Thanks,
rjco@rojan.org

bill_watson@gmail.com

Bill Watson

11813 NE 97th Ln
Kirkland, WA 98033

Date: Wed, 27 Jun 1999 18:37:00 -0500 (EST)

Just a short note to let all of you know that North America is getting a new QL and Z88 dealer and place to get upgrades and repairs done for them beloved Sinclairs. This guy has been working with me for the last few years to do upgrades and repairs on Z-88s. He is also well versed in Sinclair (yes Spectrum too!) for repair also. He is also knowledgeable about monitor repair. I highly recommend that you support him.

Dealers from elsewhere I hope that you will take the time to contact him and get yourselves established with each other so that you can all continue to support each other. His name is John Rich and he lives in San Antonio, Texas here in the USA. He is a subscriber to QL Today and to QUANTA. He needs for the Sinclair user groups to contact him, as well as TSMUG. Give him your support, and I think all of you for the support that you gave me over the years. I will still be a user and available for advice if I can be of assistance, but as long as a dealer, time, space and other considerations have taken me out of that. I am now only dealing in Amiga and some MAC software, no hardware. John is buying a lot of my QL and Z88 stock.

Rita Jean Willis bought part of my stock but will only be dealing with South Americans as she is not of Rio de Janeiro. Should she contact you, please be of assistance to her.

John Rich's email is: 74504.1333@compuserve.com
His last postcard started on his first web page for his business.
http://members.tripod.com/usa_watsonpage.htm I said Thanks,

Frank Davis

FWO Computing

frank@fwocan.com

<http://members.tripod.com/~FWOComputing/>

Working to make computing fun!

Hi Alasd,

I sent Don Lambert a letter recently letting him know that I would be more than happy to store anything that he, or anyone, didn't have a current use for (except monitors and disk drives, unless they are 3" drives). The monitors and disk drives are very too heavy to ship for their value. I recommended donating them to your favorite charity. However, the drive cases and power supplies should be kept as they are in short supply these days.

Everything else I would be more than happy to store, catalog and eventually use or find new homes for. That goes for anyone and I will pay, or at least help to pay, for the shipping cost. I have sent Don \$20 to help with the shipping cost so far, but he has spent nearly \$40 so I need to get him some more money. He indicated that he had a couple more boxes to ship.

<This is great of you, Jack >

And, Alasd, if you haven't heard, I bought out the remaining TS inventory from Frank Davis. He had indicated in 2001 that he wanted to keep the TS items on the US. When I contacted him he was contemplating sending it to South America as no one had inquired about it. We negotiated, struck an agreeable settlement and it is being shipped as I write this.

I've also purchased a 2004 system from a fellow in California that includes a Times FDD-2000 and 3" disk drive snap.

Know anyone who can help me with this?

It works only sporadically, sometimes great, sometimes not at all. Also I plan to get to the West Coast Sinclair Show in June. I hope to take a lot of items with me to share with folks. Take care,
Jack Boushcraft

27325 Frymer Rd

Wood-DA 94701

I will qualify the above a little. LG height drives may be worth keeping, but the full height are not unless that's all you have.

I found a couple of drive cases by Digital recently. One had a tape backup, the other a hard drive. I have removed everything except the power supply and ended 2, LG height, 5 1/4 floppy to each. Works great! There is also room inside the case for the drive interface and I'm contemplating trying to put the Luritan inside the case too.

I don't know about that, but I do know I do not want those computers to die. I called Don on Saturday after his boxes arrived to see how some of the above stuff had gone.

Somewhere along the line I seem to remember that there were 3 versions of the Times drive. Maybe someone in

TSMUG can confirm that I talked to a fellow named John Rylander on the phone yesterday. He thinks I may have a chip overloading problem and/or edge connectors contact problems with weak springs in the connector. He also mentioned that the springs in the sockets holding the chips get weak and contact can be lost there. I have a bunch of trouble shooting to do. **Jack Boettighe**

Hi Albed!

Thank you for ZQA! when I'll, I enjoy it very much. The ZQA! homepage is great, though I have some problems to read it because of the background-colors used, the contrast to the text color is very poor on my system. May be it's because I'm using only 256 colors???

I have founded the ZX-81-Web-Rang and I have added the URL of ZQA! page. Please look at http://home.t-online.de/home/linchid_jed/linchid_wdr.htm. If you want, put a link on ZQA! page.

On my ZX-TEAM-homepage, <http://home.t-online.de/home/linchid-wdr.htm> I have added the "MEMOTECH-archives" with the contents of some Memotech booklets for ZX-81 add-on's like 16/32K-RAM module, printer I/F, RS-232, SRG-module. Memotech spreadsheet analyzer, keyboard I/F.

At the moment I'm working to get the Memotech-Memotech booklet colors. A lot of work and unfinished, but I have got the instructions yesterday :-). The only one missing is Memotech-Assembler module with booklet.

So I would like to ask you: Could you please put this advertisement in the next issue of ZQA! :-)

Wanted Dead or Alive

MEMOTECH Assembler module for ZX-81 and for booklet. Has there been any articles in former Sinclair mags. in the USA about it? The famous Fred Nachbaur, did he ever write about this module? Does anyone know where Memotech has gone???

Any other information about this module welcome too!

Peter Lambert-Albed

Luebeckst.3

D-3822 Braunschweig

Germany

e-mail: peter@cdi.de

Thank you in advance

Take care, yours "sincerely" Peter

Green ZX-TEAM

<http://home.t-online.de/home/linchid-wdr.htm>

Amateur radio: DE4689/DE46FC #ND8 D61 EU

2nd ZX-TEAM meeting this year 25-28 March 1999 near Fulda in the heart of Germany

HiHo: I am writing regarding possibly buying some software that I saw listed on the TSMUG web page. I have received your email from Rob Swager and he said that you might be able to get in touch with someone who knows more about these items than he did, specifically someone named Lambert (?)

I am primarily looking for software for the TS1000. I have purchased some software from Jack Boettighe here in Oregon, but I do not know if he is the person with all of the TS1000/ZX-81 stuff. Any info you can give me is

appreciated. If Jack is the guy to talk to regarding the items on the list I saw on the web page, well I guess I will try him again. Thanks,

Luke Perry
809 JO Adams St.
Oregon City, OR 97048
daddy04@earth.com

>Thank you for the reply Albed. I did do a small search on the Internet for Neil Schultz, and did come up with anyone in Wisconsin. I also did not find anyone in the address search in Butler, WI with his name so I suspect that is an old address. Oh well, I did write to Lambert in Indiana and hopefully he will be of help.

>> The person who might know about Schultz is Rob Swager whom you contacted already >>

How long have you been publishing the newsletter for TSMUG? Well that must really be a labor of love considering there is probably not that many people still using Tintenflexer machines anymore. Especially in this day of Pentium II's and 10 GB hard drives! I love old technology and especially love the simplicity of older computers such as the Tintenflexer's.

>>> I said it to Sinclair for licensing BASIC back then in 79 when I lost the ZX-80 from a bit. The IBM BASICA at work was driving me crazy with very limited access to the main frame computer. I wanted to really learn BASIC, finally my company had TimeShare (TM of course) that made things a little easier but the bean counters were watching our 'connect time' that is where Sinclair came to the rescue.

Later I got the ZX-81 then in 82 I got the TS-2088 - 84K sound and color too, wow :-)

>You have got me interested in learning more about the TS-2088. Was a Times's answer to the Commodore 64 but? Now available are they still if not we looking for one with all of the original stuff (manual, cables, etc.) Just curious :-)

>>The TS-2088 was the first best shop from the ZX-81 / TS4088 with their 32K RAM. The 2088 that I already was waiting for came out in 82. It had 64K RAM, connects to color monitor and improved BASIC. It was really fun to program in those days.

Times had the rights from Sinclair to produce it in North America and Sinclair had the Spectrum in Europe and elsewhere.

The Commodore 64 I was using at work was for \$800 including the monitor and a dot-matrix printer. I got the 2088 for \$120 and plugged it into a 13 in. TV that had a video input in the back. It was fun.

Of course there are lots of software for it even disk drives by third parties. You can still find them. Unused ones are hard to find but I know of one source.

Rob Swager started the Newsletter in 84, and since he has a full time job at Motorola, he felt that he couldn't do justice to it and asked me (just retired) to take over.

I still use the TS-2088 to run my old trusty PROGRAMS@earth.com I mailed your copy yesterday.

Luke Perry@earth.com

To: Find Home

HiHo: I got your name from Albed Albed. He mentioned that you might have a TS-2088 for sale?

Yes, Luke, I have one left in the original manufacturer's box. I was hoping to swap it for something I can use (like

something in the "audio" line or whatever) but I would be willing to sell it for 100X including the shipping cost.

I'm sending a CC of this to *Alfred* - to Thank him for his TIPS & EFFORTS. Bye, Sincerely, Fred Rosen

Sender: spertling@psu.edu

I had a look at your site from a posting in the comp.sys.siemens news group. I am an Englishman living in southern Texas who used to have a Sinclair Spectrum and ZX-81 while in England. Who would have thought that all these years later they are still generating such interest! And in the USA of all places... I know that Times sold them in the USA, (although of course different specifications etc), but I thought they had basically 'bombed' out and disappeared, after all this was Commodore's 64 home territory.

> True, Times bowed out from competing with the likes of Commodore, TI, HP etc. They didn't have the will to fight competition >

I like all computers, but I think the Sinclair range of machines had that 'something' that still seems to be keeping them alive today... Also I guess there is the romance of the classic concrete British inventor behind them?

I had just ordered a ZX-81 kit from Zebra systems to build with my Wife's younger brother, just for a bit of fun and nostalgia... } I can't believe that soon the ZX-81 will be 30 years old! Makes feel old...

"There is a theory which states that if ever anyone discovers exactly what the Universe is for and why it is here, it will instantly disappear and be replaced by something even more bizarre and inexplicable."

"The Rascals of the End of the Universe", by Douglas Adams. Well I was born in Guildford, Surrey although we lived in a village outside.

Lived there until about 25 when I moved to Wiltshire (Where Stonehenge is) the last place I was in was Sweden. I got married to someone from the valley down here about 2 1/2 years ago and lived in England for a while and we came here.

Your comment about today's programs are things as true. Don't get me wrong I love progress and today's technology. I work with the latest PC's. The great thing about the Sinclair machines is they were a beautifully simple design especially the British versions as I understood the American Times version had extra features such as an extended graphics mode, better sound and a cartridge port?

I want to know the memory map of my Spectrum by heart (well not necessarily all addresses!). The trouble now I have getting a piece of software or a module to work under the 'supposedly' plug'n'play Windows 95/98 and I consider that I am very competent with computers.

Corrado Porfiri

Hi Bob,

I have a couple of e-mail addresses. The one at work is braves@brad.cbl.com and the free one at home is bob_wilson@tuno.com.

Have you checked out the Wangave emulator lately? I almost stopped using the Laster emulator once that the Wangave emulator almost does a 100% emulation of the Times 3088. I'm just about ready to send Edgar Ruiz, one of the Wangave authors, a 6804 compatible version of the Series 1 8086 for use with the Wangave emulator. It works very well! Keep in touch,

Keith Watson

Hiho,

I am a manager at the comp.sys.siemens newsgroup stating you might know about a Larken Disk Drive Interface for the 3088. I am looking for the one for the ZX-81/TS-1080 version. Do you know of anyone know who might have

1. Larken Disk Drive interface

for the ZX-81/TS-1080 computer? I would either like to purchase the card or opt if necessary. I would appreciate any information you might have. Thanks,

Mark McCann

2017 Mulberry

St. Joseph, MO 64501

mccannm@postexpress.net

816-350-8502 (d) 816-350-8778 (fax) 816-387-2510 (wire)

< The best way that I can be of help is to place an ad for you in the next March Newsletter >

Hello Doreen,

I sold out my hardware and software business (but not my copyrights, trademarks and patents) for the QL and the ZX computers. They were sold to John Bush of House Electronic Service of San Antonio, Texas, USA. His email is jbs@1333@compuserve.com. He has got a start on a business web page at:

http://members.tripod.com/~hse_computing/hse1.html

All of my stuff is busy wringing its way to him by UPS. He has been repairing and upgrading computers for me for a couple of years and is a long time Sinclair user from back to his days in the military stationed in the UK, in fact his wife is from there. He offers upgrades and repairs for QL, ZX-81, Spectrum and ZX computers, as well as software and hardware. I hope that people will give him their support. Unlike many people when they get stinking with Sinclairs they just up and disappeared leaving a hole in their place. I wanted to leave someone there to carry on in my absence. My thanks to both the users, developers and the other vendors with whom I have had contact over the years.

Frank Burns

FWG Computing

Frank@fwg.net

<http://members.aol.com/~FWGcomputing/>

Hi Alfred,

Just thought I'd thank an email web page. I mentioned having contacted Times for input on the web page I'm working on. Here is the latest email I've gotten from them. - Jack Jagella, Sally wrote

Jack,

Thanks for keeping me updated. So far, so good. Except the link to the Museum seems a different description. It is not the corporate web site, but a dedicated solely to the museum's efforts. The corporate site remains at www.times.com. Have a great day. > -Sally

>Sally Jagella

Webmaster

Times Corporation

jagella@times.com

www.times.com

www.timespower.com

—Original Message—

> From: Jack Bonbright [mailto:JBonbright@valdewet.com]

> To: Jagella, Sally

> Subject: Re: Times Sinclair Computers - Web Page Update

> Hello again,

> Just a note to let you know that this site has been updated significantly since I last emailed you, and, there is much to come as I find the time. The links are fixed, more have been added and there's even a few pictures. I have not linked to your Times one as yet, but that is in my plan.

Anyway, I hope it meets with the satisfaction of Times Corporation. If not, please let me know and I will change anything necessary. Take care,

Jack Rastwight

R

Robert B. Rastwight
2416 N. County Line Road E.
Kendallville, Indiana 46748
(219) 837-8081

Dear Alod

In current *QL Today News*, the production version of the Q40 will probably appear both as the Q40 and the Q60. When using a 68060 processor running at 66 MHz, the Q60 will be over 70 times faster than a standard QL with a JS-ROM.

The upgrade of Turbo Compiler came to an abrupt halt in October because of the need for recovery of the hard drive containing the source files so it will not be available all sometime in '89. (Apparently, someone had not made a backup of the drive, which is rule No. 1, No. 2, No. 3 ...)

The Turbo Toolkit has been extensively changed and is now so compatible with SMS/QE as to enable installing it as an SMS/QE module. The new Turbo Pointer Toolkit still needs lots of work to allow Turbo to compile pointer-driven programs. It will allow completion of BASIC programs under SMS/QE but probably not all the enhanced SBASIC features, at least not in the early versions. It is planned that Turbo eventually will be released as Freeware.

The new version of Perfection is currently being Beta tested. It now supports high resolution screens up to 1024 X 768, improved subdirectory support, and dramatic improvement in cursor handling. The projected release date given in the News article was January '89.

Since SyQuest discontinued the EZ removable-media drives previously used by Qubase, QubaseSoft is now working on support for ZIP and LS-120 ATAPI/IDE drives. The newly-announced (December '88) 250 Mb ZIP drives, that are also backward compatible with 100 Mb cartridges, put floppies back in the race again in that size-category.

And finally, Jordan Mac Software announced in the current QL TODAY that Marcel Rigus, author of QPC, has QPC2 up and running, though not quite completed at the time of the News article. The new version will allow task-switching under Windows on a PC without having to go through the

quit and restart procedures as in QPC

Dear regards,

Bob

Alod,

Thank You for the Waj! humor. I don't read if my list contained T52068 cassette programs ... but if I did, please remove them because my entire library of cassette programs is gone. And, if I didn't Thank You before ... Thank You for driving Lake Perry my way. He purchased my last "in the original factory box" 2000 ... as all I have left now are a couple of "slightly used" 2000's (which should be in the list). I also recently acquired 2 new A/D data interfaces for parallel printers which could be added to the list (if your reviewer hasn't "gone to press" yet).

I had mentioned, as an aside, to a computer friend (who's pride and joy is a new 486MHz "pentium based" computer) that I was considering learning C/C++ just for the "hell of it". In his reply, he sought to discourage me by listing the reasons why I shouldn't take on such a HUGE task. He finished with:

>Another thing ... programs today are 100 megabytes and up TO WISCH I REPLIED: That last sentence (referring to most of today's "popular" Microsoft based programs is the one for which I Thank You a "lifetime")

Most of those 100 megabytes are for graphics ... or, according to a recent article I read, are used "just because they're there" and are mostly waste! I don't know if today's programmers realize it ... but they've created a condition where it's practical for folks to write their own programs. (In machine code ... if they know it ... but in any language they know ... providing they have a good "assembler" program for the language ... and this would include "basic" ... which many folks learned in the early 80's and which is very similar to (Microsoft Basic). Think then ... folks learned to "crunch" programs because there was very little memory available (usually less than 64K).

My point being ... I can reuse my BASIC programming abilities in a comparatively short time ... which I now intend to do! I know that computers operate in some form of "machine code" (from switches "on" or "off"). All I have to do now is find (or write) a program that knows which switches to operate! We sometimes forget that "just because it's DONE THIS WAY" doesn't necessarily mean that it's the CORRECT and/or ONLY way to do it. THANKS AGAIN, Bob.

AND, while I'm about it ... Thank You, Alod ... for all the help you've been to me (and for your continued effort for everyone interested in T5 computers, etc.)

Sincerely,

Bob

Alod,

Another thought just struck me. Has anyone written a conversion program to the comparatively simple and, to me, "superior" Taven 2004 BASIC code to use in one of the earlier (but increasingly faster) IBM PC's?

Sincerely,

Bob Ross

>I believe that you are referring to a T5-2004 emulator. Gordon Lawler offers emulators for the Spectrum at the Ads section.

<Hello John, (Bob)

Frank Davis had advised that you are the proud owner of his Sinclair inventory.

I am the publisher, editor and treasurer of the Times/Sinclair North American User Groups - TSNAUG

FROM THE CHAIRMAN'S DISK II

Donald S. Lasker

Had a letter from Don Ovan that wanted a copy of DUS so that he could use it again. Somehow his working copy and backup copy got trashed. I complied with his request and got him going again with that DUS is Disk Utility System for the MacKee disk interface. It is a software with good utilities that do things that none others do. Give a disk that might have bad blocks? Use one of the programs and it will go through the disk and mark all the bad tracks and when it is done you will see that the capacity has been decreased if there were bad blocks. Or use it to FORMAT a disk and it reports how many bad bytes there are.

Luke Perry wanted to know where to get TS-1068 software so I referred him to Jack Boatwright. Jack has some TS-1068 software that I think he got from Frank Doran.

I have been boxing and shipping a bunch of stuff to Jack Boatwright that I must get rid of. I have gotten what I have set down and I will have more for him if he wants it when I get more sorted out and packed. Letting go is so hard to do that on the other hand have not looked at or used them for so long and it is time to get it into the hands of people that can use it.

I haven't come up with a way to get the data on some disks (288) sent to the 288) and I may never get that accomplished that way. It looks like I may have to make hard copy and then scan it into the PC that I will occasionally get or else (heaven help) type it into the 288. I do need to keep my financial records so that I will know what I have and where.

Crazy weather! Went shopping 20 miles away. Left here in sunshine and returned in a heavy snowstorm that didn't stay long on the ground.

I tried to get to the T&E pages on the Internet at the library but while I did see some stuff it was very little. But of course I haven't learn to navigate the Internet. I sure have to read a very thick book to learn what I need to know that is only two pages worth of information. I will have to get back to the library and try again.

I go to the computer store and stare then have computer departments and I have asked questions and have read magazines. No wonder I like the TS-2068 so much. Getting into the PC is like taking flying lessons on the 747 as the first airplane you'll fly, you are overwhelmed before you even begin! G/F

While I am not familiar with the 288, here is what appeared in ZGAI, Winter-92. It should work with the 288 as it did with the PC.

TS-2068 Talks to a PC by Modem

by Alfred Kachals

It has been a challenge to have a 288 communicate directly via modem with a PC modem to transfer text files. The procedure was to upload files to a 288 by one computer and then download with the other, said Bob Evranger spent an evening with me to tackle this problem.

The communications modems have to have a line that has a tone "carrier" and provides a ring "signal". Connecting two modems together from two computers eliminates the carrier and the signal and the modems will not turn on. It has been done with the two modems connected to the same phone line. That held up calling in receiving phone calls for the duration, at 18 text characters per second which is what I got with the 288 modem.

With a Hayes compatible PC modem, here is how:

1. Connect the two modems lines that normally

go to the telephone line together using a two-line plug without any connections to the telephone line.

2. Turn on both modems and load the modems software: MTERM II (Laser V) or MacCom (Macintosh for the 288). Load buffer size 1 used MacCom.



3. Set both computers to TERMINAL mode and the TS-2068 to ASCII (toggle dot, none). All other parameters have to match the PC modem's of course or vice versa.

The following has to be done rather rapidly before the PC abandons the connections.

4. On the PC modem, ENTER ATA (which is Hayes command that forces the PC modem to answer the phone without the benefit of a ring or a tone). The PC modem transmits a long squeal and reprograms the signal from the other modem and CONNECTs.

5. Set the PC in RECEIVE mode, Xmodem 300 BAUD and enter the file name.

6. From the TS-2068 select SEND (transmit) file name Ctrl and ENTER.

7. The PC acknowledges and receives the file.

8. Exit SEND to TERMINAL mode and ENTER Ctrl Z (SHIFT-7 Z) to tell the PC "end-of-file".

QL Hacker's Journal

Supporting All QL Programmers

#10 December 1998

The QL Hacker's Journal (QHJ) is published by Tim Swenson as a service to the QL Community. The QHJ is freely distributable. Past issues are available on disk, via e-mail, or via the Anonymous FTP server, <http://www.ql.com>. The QHJ is always on the front end for article submissions.

QL Hacker's Journal

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<http://www.procton.com/Show/ql/hack/journal/index.html>

Editor's Forum

In this issue I want to take a look at a couple of Unix languages that have recently been posted to the QL. In the QL-users mailing list, I've seen some comments that basically say "Why use these other languages on the QL?"

All development should be done in SuperC++ or C++ and use the Pointer Environment." As much as I agree with that, I don't see Perl or AWK being used to do serious development on the QL. I see them being used to accomplish short personal tasks. There are some tasks that can be done much easier with AWK or Perl than in SuperC++ or C++. Of course, there is the ability to use Perl/AWK programs from other environments on the QL and the ability to learn Perl/AWK even if you don't have access to a Unix system. I've done some Perl stuff at work because it is the best Unix language to learn in, and now that I know Perl on the QL, I can use the same programs at home.

West Coast Sinclair Show

Since the last US QL Show in Bedford, PA, there has been some talk about having two shows in 1999, one on the East Coast and one on the West Coast. The vendors support the idea, having one show right after another so they can let both in one trip. I think they are just tired of the East Coast and want to visit sunny California. So, Don Williams (who has recently moved out West) and I are organizing the West Coast Sinclair Show. This show will encompass all Sinclair computers with most of the vendors covering the QL and C++, but we hope to have something of interest to all Sinclair users.

At the moment the show is only in the planning stages. We are worried about getting enough people to attend to make it worth having a show. We would like to get about 20-30 people to show. Here is what is being planned. The show will be in Union City, CA, on the east side of the San Francisco Bay, about half way between Oakland and San Jose. The show will be held in the Mahan Banquet Hall, a store front used by a Pakistani restaurant next door. The Banquet Hall is within walking distance of the Union City BART station (local commuter rail) and only about 2 miles off I-880. The show

will be held on 3 June. For those coming from out of the Bay Area, the South Hayward Model 5 is the worst of shows. It has a Denary's and McDonalds on the premises and has a Taco Bell within walking distance. The hotel has bus access to the Union City BART station (and then to the show site). The night before the show, I plan to have a Bar-B-Q at my house (about 1.25 miles from the hotel). I'll supply the hamburgers, hot dogs, chips, and soda (Jockey, there will be 2 kinds of Root Beer). For any Europeans coming to the show, I'm offering a limited tourist service.

Let me know what you would like to see in the Bay Area, how you plan to get around, and I will look into maps, travel directions, and any tourist costs. If you only know of a general category, say natural history or aviation, I can provide a list of places of interest. Since there will be a week between the two shows, this will allow plenty of time for sightseeing in the Bay Area. If you are interested in coming to the show, please let me know. I am especially interested in hearing from those on the West Coast. I would hate to see most of the attendance from Europe.

AWK

AWK has been posted to the QL by Peter Teller and is a Unix language that is used for all sorts of list processing tasks. The name comes from the three writers of the language, Aho, Weinberger, and Kernighan. AWK works very similar to grep. For each line of input, it searches for a given pattern. If the pattern matches, then an action is performed. If there is no search pattern, then it is assumed to match and the action is performed. This is the formal definition of what AWK does, in reality, the code looks a lot like other languages, and each line usually does not have a pattern and is therefore executed. Here this all works will become clearer as you read the code below.

To give an example of how to use AWK, here is something that I'm using AWK to do. I keep a list of people that get the QHJ via e-mail. In the list is the persons last name, first name and e-mail address. From this list I want to generate a e-mail address only list, the mailing list name, and a list of people, sorted by last name. I've created a test file with each field separated by colons and each record is a separate line. Here is an example file:

```
Andrews Bob (bob@jared.com)
Johnson Ralph (rjohn@vermail.com)
Smith John (john@calixtal.com)
Wilson Ted (ted@jmail.com)
```

The first AWK script will print out only the first field from each line. Here it is:

```
rep1.awk
{
    pg = ""
    print $1
}
```

And the output is

```
bob@mail.com
ry@newmail.com
john@oldmail.com
tre@mail.com
```

Basically all the script does is this: for each line, change the Field Separator to be a colon and then print out field #3.

The second report is a little more complicated. It will have a header, then the e-mail addresses, and then a footer giving a count of the e-mail addresses. The BEGIN block will only be executed at the beginning of a program, before any work is done on the input file. I'm using the BEGIN block to print out a header for the report. There is also an END block, which will only be executed at the end of the program. Here is the 2nd AWK script:

```
#!/usr/bin/awk
BEGIN {
    print "Name      E-Mail Address"
    print "-----"
}
FS = ":"
print("File Name: " FILENAME)
}
```

Here is the output:

Name	E-Mail Address
Bob Anderson	bob@mail.com
Ralph Johnson	ry@newmail.com
John Smith	john@oldmail.com
Ted Wilson	tre@mail.com

This time I've decided to use a `print` statement, which is very similar to the C version of `printf`. The problem though is that the output of the names is right justified and there is too much space between the first and last name. I want one space between the first and last name. Here is a 3rd AWK script that uses a regular print instead of a `printf` and gives me what I want: `#!/usr/bin/awk`

```
#!/usr/bin/awk
BEGIN {
    print "Name      E-Mail Address"
    print "-----"
    count = 0
}
FS = ":"
print FILENAME
count = count + 1
}
END {
    print "-----"
    print "Total Addresses = " count
}
```

Here is the output:

Name	E-Mail Address
Bob Anderson	bob@mail.com
Ralph Johnson	ry@newmail.com
John Smith	john@oldmail.com
Ted Wilson	tre@mail.com

Total Addresses = 4

Now if I had to write this program in SuperBasic, I would first have to write a section that splits out the individual fields into different string variables. With AWK it's automatic and very easy to do.

Perl

Perl is a language that I started playing with back around 1996. When I started using Perl for a project, a few people wondered if this was a good idea, given that Perl was a relatively obscure language and they worried about people knowing Perl after I left. Well, Perl has now become THE language for Linux. There are over 15 books available on Perl, a Perl magazine, and many, many web sites. Perl was designed to be a kitchen-sink language for Linux and

allows the programmer to get the same task done many ways.

Perl is more expensive than AWK and you can get a lot more done, although some AWK programs will be shorter than Perl. If you do program in AWK and wish to convert to Perl, there is a nice AWK-to-Perl program that comes with the Perl distribution. To show how different AWK is from Perl, let's use the same example programs as above, but write them in Perl. The first Perl program is the same as the first AWK program. Note how many more lines it takes in Perl. I'm sure this Perl program is not the most optimized, but even an optimized Perl program would be longer than the 2 line AWK program. Here is the program in Perl: `#!/usr/bin/perl`

```
#!/usr/bin/perl
# Read the file into an array
open(FILE,"test_data");
@array = <FILE>;
close(FILE);
foreach $line (@array) {
    @array2 = split(/:/,$line);
    print "array2[2]";
}
```

And the output is:

```
bob@mail.com
ry@newmail.com
john@oldmail.com
tre@mail.com
```

The first line of a Perl program starts with `#!/usr/bin/perl`, or something like that. This is not a part of the Perl program, but is used to tell the Linux shell to run Perl and load in the rest of the script. It is not needed for the QL version of Perl. With the second report, I decided to use the 'format' feature of Perl. It allows you to define fields so that the output can be formatted into neat columns. Left and right justification and the desired point can be handled for you. It can take a while to get used to formats, but once you do you find them useful for all sorts of tasks. Here is the 2nd script:

```
#!/usr/bin/perl
# Define formatted output
format TOP =
    Name      E-Mail Address
```

format STDOUT =

```
##### @#####
Source, Total
format BOTTOM =
```

```

    Total Address = @-+
Source
# Read the file into an array
open(FILE,"text_data")
@array = <FILE>
close(FILE)
$# = TOP
$# = KIDCOUNT
Source = 0
foreach $die (@array) {
    @array2 = split/ /,$die
    Source = @array2[0] + @array2[1]
    Source = @array2[2]
    write
    Source = Source + 1
}
$# = BOTTOM
name
Name
E-Mail Address
```

Bob Anderson	bob@jmail.com
Ralph Johnson	q@jseveral.com
John Smith	john@jmail.com
Ted Wilson	ted@jmail.com

```

Total Address = 4
As another example, here is a program that I wrote to figure
out the odds on die rolls
```

```
#!/usr/bin/perl
# die.pl
# This program determines the percentages in rolling X
number of Y sided die. The simplest approach to doing
this is
# to do something like this (for 2 4-sided die)
# FOR x = 1 to 6
#   FOR y = 1 to 6
#     roll = x + y
#     NEXT y
# NEXT x
# But this means that the number of die used is hard coded
# into the program. This programs approach is like an #
# combiner. An array is used that is equal to the number of #
# die used. The first die is incremented and each other # die
# is incremented when the one next to each reaches Y # (just
# using the 2 4-sided die example)
# Here is a visual diagram
#
# 1 1 1 1
# 1 1 1 1
#
# Once the first "die" hits Y, it goes back to 1 and the #
# "die" next to it rolls over to 1. This continues until # all
# possible combinations have been made
#
# Output is
# Die Roll - the value of the die
# Possible - how many times the die roll can occur
# % of Roll - Percentage of total rolls that this roll
# can occur
```

```

# To-Hit %, - Percent chance of making rolling the
number
# or less
format top =
Die Roll Possible % of Roll To-Hit %
#####
format STDOUT =
@die @roll @hit @# @roll @#
In $die,$roll,$roll,$roll
die "Usage: die.pl die_sides num_dice" if (@ARGV < 2)
Source die = @ARGV[1]
Sides = @ARGV[2]
print "\n Roll of Source die Sides-Sided Die's",
# set all die to 1
for ($x = 1, $y <= Source die, $x++) {
    $array[$x] = 1
}
$array[1] = 0
for ($y = 1, $y <= Sides**Source die, $y++) {
    # increment the first die
    $array[1] = $array[1] + 1
    Total = 0
    # Go through each die and see if they need to "rollover"
    # then incrementation of die
    for ($x = 1, $x <= Source die, $x++) {
        if ($array[$x] == Sides+1) {
            $array[$x] = 1
            $array[$x+1] = $array[$x+1] + 1
        }
        Total = Total + $array[$x]
    }
    Total_array[Total] = Total_array[Total] + 1
}
# Report Section
# Output is
# - Die Roll Of (total of dice)
# - Number of Times Possible
# - % of that Roll
# - % of To-Hit number
Total = 0
for ($x = Source die, $x <= Sides**Source die, $x++) {
    $roll = Total_array[$x]
    $rollper = (Total_array[$x]/Sides**Source die)*100
    Total = Total + Total_array[$x]
    $rollper = (Total/Sides**Source die)*100
    write
    # print "Die Roll of $x,Total_array[$x], $rollper,
    $rollper",
}
# Then using Perl, remember that there is no "shell"
# in QDOS. In the standard Perl use, there are a
# couple of different ways to have Perl run an OS
# command, like DEL, or MS-DOS or "run" as Unix. To do
# this, Perl executes the operating system shell and passes in
# the command to execute. This works for run-commands
# or internal shell commands. In QDOS these "shell" calls
# work out to be really nothing more than an EXEC, or
# EXEC, or call. There is no way to have Perl run a
# QDOS/Supercalc embedded command, like "calc"
# Here is an example
system("r");
```

This works out the QDOS command of
EXEC.W to

The Perl command

system("copy file.zip"),

works out to the QDOS command of
EXEC.W copy file.zip

So if the following Perl command

system("dir D:_"),

works out to the QDOS command of
EXEC.W dir D:_

which is needed.

On the QL, the back tick character is really the Pound Sterling symbol (patak, for portability reasons I won't show here). This means that if you take a Perl program written on another system and bring it to the QL, all of the back tick characters will show up as the Pound Sterling character. This also means that if you are writing a Perl program on the QL, use the Pound Sterling character and it will be treated as a back tick. Since the two characters have the same ASCII value, you don't need to worry about converting, by hand, the two characters, as it will happen automatically.

Where this is important in Perl, is in the following command:

(\$copy = "is big")

Having a string in back ticks (versus single or double quotes), tells Perl to execute what is in between the back ticks. This is the same convention used in the Unix C Shell scripting language. If you are looking for books on Perl, remember that Perl for QDOS is Perl Version 4 and most books deal with Perl Version 5.

The first edition of "Programming Perl" and "Learning Perl" (red backings) dealt with Perl Version 4. There are some major changes between Perl 4 and Perl 5, including some syntax changes in command functions.

The Shell

While on the subject of Unix languages, Adrian Jovan has continued the work of P. J. Taylor with The Shell, a command line shell for QDOS. Given my Unix background, I would say that The Shell is similar in functionality to Unix shells (C, Bourne, T, Korn). The Shell considers commands to be programs to execute and handles command line arguments in the standard way. Files are named with the pipe (|) symbol, and executing programs in the background (like EXEC) is done with the ampersand (&). Given that 'grep' is available from the CSH distribution, 'wc' comes with the GNU Text Utilities distribution, and that 'ls' is available with The Shell, you can execute the following command line in The Shell: `ls | grep _cat | wc -l`. Another nice thing about The Shell is the way it handles directories. It treats level 2 directories as real directories. You can 'cd' to a directory, run 'ls' and see only those files in the directory. You can also 'cd /bin' or 'cd /usr'. The Shell understands both the MS-DOS and Unix directory syntax. The Shell also handles files with dots/perses in it (file.txt). So, if you are doing a lot of keeping programs over from other environments and have lots of file with dot extensions, The Shell is handling the files without having to put the files in quotes. The Shell version 1.10 is available from Adrian Jovan web page: www.angelika.com/b4/sh/

Character String Emulation In HiSoft Pascal Ver. 4

By David Solty

One of the common gripes about HiSoft™ Pascal Version 4 for theTandy/Ranfac 2000 is its lack of built-in operators for handling a dimensioned array of type CHAR, henceforth referred to as a string. The crux of the problem is that if a string is not completely filled by data or spaces, the remainder of the string is left filled with whatever garbage is in memory at the time. When a WRITE or WRITELN is called, the procedure attempts to print the entire contents of the string, which includes the garbage left in the unused portion of the string, plus all the data. This results in garbage characters being printed on the screen or printer if the system does not simply crash.

Prior to a program which demonstrates how a record type called "word" as this example - containing a string and an internal counter, which is used to keep track of the number of possible characters the string contains, can be constructed and used to solve this problem. Reading and writing information to and from this "word" type, however, also requires special modified versions of the procedures READLN and WRITE(), which in this program are called StringRead() and StringWrite().¹

Program Listing

PROGRAM PARSER,

EXC:QLive (Live)

```
{
Purpose
The object of this program is to accept a sentence from the
user then to break the sentence into its component words
and to display each word on a separate line.
History
Program by David Solty,
Ottawa, Canada,
March 23, 1990
}
CONST
  maxword   = 15,
  maxsentence = 15,
  space     = CHR(32),
  first     = 1,
TYPE
  string = PACKED ARRAY[1..maxword] OF CHAR,
  word = RECORD
    body string,
    length INTEGER
  END,
```

```
VAR
  sentence ARRAY[1..maxsentence] OF word;
```

```

row, col, nextcol, count = INTEGER,
delimiter = BOOLEAN;
PROCEDURE SpaceTrap,
|
| ensures that there is only 1 space between words
|
BEGIN
  REPEAT
    READ(sentence[row]body[first]);
  UNTIL sentence[row]body[last] <> space
END;

PROCEDURE StringWrite(VAR phrase = word);
|
| Writes only the required length of each character string.
| This is required when using T2 col. mode
|
VAR letter = INTEGER;
BEGIN
  FOR letter = first TO phrase.length DO
    WRITE(phrase body[letter]);
  END; {Procedure StringWrite}

PROCEDURE StringRead,
VAR i = INTEGER,
BEGIN
|
| Initialize the variables
|
count := 1;
row := first;
col := first;
nextcol := col + 1;
delimiter = FALSE;
FOR i = first TO maxsentence DO
  sentence[i].length = 1;
  WRITE("Type a sentence > ");
  READLN; {Clears the buffer of EOLN}
  WHILE (NOT EOLN) AND (row < maxsentence) DO
    BEGIN
      READ(sentence[row]body[col]);
      IF sentence[row]body[first] = space THEN
SpaceTrap;
      IF sentence[row]body[col] = space THEN
        delimiter := TRUE;
      IF (NOT delimiter) AND (count < maxword)
THEN
        BEGIN
          count := col + 1;
          nextcol := nextcol + 1
        END
      ELSE
        BEGIN
          sentence[row].length := col;
          count := count + 1;
          row := row + 1;
          col := first;
          nextcol := col + 1;
          delimiter = FALSE
        END; {if then else}
      IF EOLN THEN sentence[row].length := col + 1;

```

```

{Accounts for the last word entered into the EOLN
marker }
    END; {While loop}
  END; {Procedure StringRead}

PROCEDURE FinishDoc,
VAR
  subsequence = INTEGER,
BEGIN
  subsequence := first + 1;
  WRITE("Pressing > ");
  StringWrite(sentence[first]);
  WRITELN;
  IF count := subsequence THEN
    BEGIN
      FOR row := subsequence TO count DO
        BEGIN
          WRITE(" ");
          StringWrite(sentence[row]);
          WRITELN
        END
      END
    END; {Procedure FinishDoc}

PROCEDURE SongAndDance,
BEGIN
  PAGE;
  WRITELN("      Partner"),
  WRITELN;
  WRITELN("Program By David Scilly"),
  WRITELN;
  WRITELN("The object of this program"),
  WRITELN("is to accept a sentence from"),
  WRITELN("the user then to break the"),
  WRITELN("sentence down into its"),
  WRITELN("component words and to display"),
  WRITELN("each word on a separate line"),
  WRITELN;
  WRITELN;
END; {Procedure SongAndDance}

BEGIN {Main Program}
  SongAndDance;
  StringRead;
  WRITELN;
  FinishDoc;
  WRITELN;
  WRITELN("End of Demonstration.")
END; {Main Program}

```

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 Voice: (913) 733-3120
 * HESB has released several updates of its ZX Spectrum
 Pascal program; many versions 4 was converted and released
 for the Tintex Sinclair 3008. The latest ZX Spectrum
 version, (version 1.7M), features a 51 column mode plus
 the string handling capabilities we are trying to emulate
 here.
 † For those of you who have additional questions, please
 feel free to write me at ac15a@falconet.ca/ironet.ca

How to Hack on The 3N Spectrum *Les Carroll*

PART 6 - Commercial Protection Systems

If you can understand everything we've done so far, you can now probably track just about any budget game or YS coverage that's thrown at you. And indeed, you can probably get frustrated as "Proteus POKER" shows its mouth out (like a lot of ineptuous hackers, I might add) by using the knowledge you've got. However, if you want to become a hacking legend, you should have an eye on some of the numerous commercial protection systems, which have been written by developers for software houses.

I think we're getting seriously into Matallax territory now, but I'll try and do as much as possible with only STX and 007 Disassembler.

I think I should also say that cracking commercial protection systems is NOT easy. The code is deliberately badly structured and obscuroly coded to put you off, so you'll have to persevere. You really do need something like a Machine or Dopey to crack some of these systems, because they can convert the system variables to BASIC, and you sometimes need to know the values of certain registers, which is impossible to determine using BASIC. You'll also need some games other than YS stuff to hack, but fortunately, protection systems such as Speedlock or Altoscan are so common, you're bound to have a game with one of them on. I'll be doing examples specific to our game, but you'll find that other games with the same protection is pretty much the same, except you're likely to find that some of the addresses will be different.

Before we start, I'd just like to point out that I'll be referring to the term "breakpoint" a lot. This is simply a small bit of code which will stop the program dead in its tracks. Using DEVPAC, you just press the W key (in a Matallax, you do the same as a stack trace, by setting down the two bytes at the place you want to put a breakpoint, then replacing them with 008 and 00E. If you are using 007 disassembler and/or STX, you'll need to put a jump to the start of the program (003 008 040 for 007 disassembler; STX varies depending on where you put it). So let's start with something relatively simple.

SLEEPLOAD

"Sleepload" first appeared on Firebird games around March 1987, and was used by them on every release by them from then on until their demise in 1989. It constitutes a SBC loading system in that each file loads in a series of blocks, which are numbered as hexadecimal. The hardware is not because it uses non-standard eds, it's just that it jumps around so much in memory you need to put in an awful lot of software patches. I'll be hacking Bubble Bobble as an example.

First of all, load in "Bank, and load in the BASIC loader.

Bubble LOVE 10 LUN (79

```
10 REM
20 CLEAR 20000
30 BORDER 0:PROG 0:INK 0:CLS
40 PRINT AT 1,1;WAPER 1:INK
7) "BUBBLE BOBBLE"
50 LOAD "Bubble" CODE 32450
60 RANDOMIZE CSR 52440
```

There is absolutely nothing difficult about this BASIC loader, so just type CLEAR 20000:LOAD "" CODE and start the tape to load the first block of code. Stop the tape when it's loaded, and load in your disassembler into address 32750 (it's a safe one), and have a look at the code at C000.

```
C000 3A 9C 5B      LD A, (#009C)
C001 12 08 40      LD (#0001),A
```

This takes the byte at #009C and puts it in #0000. #0000 is the system variable for the C000 page number, so what you're accessing

```
C004 1K 02        LD A, #02
C005 CD 01 10      CALL #1001
```

This is a standard ROM routine, and all it does is to tell the computer we want to print something on the screen.

```
C006 3F 30 0A      LD A, #0A
C007 32 08 3C      LD (#0007),A
```

As you may be aware, poking #0008 (20000 decimal) with 0 will cause the computer to crash if you press BREAK, or return to BASIC. So PUSH CODE, which changes it to LD (#0008),A, this is harmless.

```
C00F CD CE CE CE   CALL #00CE
```

The routine at #00CE prints the message "Searching" on screen.

```
C012 10 09        LDH #0010
```

We haven't come across the command DUNE before. It basically means "decrease the value in the B register, and jump if B is not zero".

```
C014 11 04 FF      LD B, #FF00
C017 14 04 00      LD B, 0
C019 CD 1A CE       CALL #001A
```

This routine prints the number 00 on screen.

```
C01C 3E 00 00      LD A, #00
C01E 32 18 FF      LD (#FF1E),A
C021 CD 74 CD       CALL #0074
```

This routine loads in a block of code from tape (in actual fact the start address is #FE00 and its length is #008 bytes).

```
C024 3E 00 FA      LD A, (#FE00)
C027 FE 04         CP #04
C029 20 FE         JR NZ, #C021
```

This routine loads A with the value at #FE00. The CP instruction compares the value in the A register with something, so this case the number #04. If there is no match, the routine jumps back to #C021, otherwise it continues. This routine actually checks to see if the block is found.

```
C02B 3A 01 FF      LD A, (#FF01)
C02E 8A           CP 0
C02F 20 00         JR Z, #C030
```

This routine checks to see if the block has been loaded successfully. If so, it jumps to #C030, otherwise it continues.

```
C031 CD 14 CE       CALL #0014
C034 18 0E         JP #C031
```

This routine prints up the "loading error" message, and attempts to load the block again.

```
C036 CD 34 CE       CALL #0030
```

The routine at #C030 is a decryptor (have a look - do you see why?), which decrypts the block loaded in so that #FE00 to #FE7F. "You don't need to crack it yourself".

```
CD39 80 CP (HL)
CD3A 20 05 JR 2, #CD41
```

The routine reloads the block if the value of A equals the value at (HL). Don't ask me why.

```
CD41 CD 8F CD CALL #CD5F
```

This routine moves the code at #FF00 to where it should really be in memory.

```
CD44 CD 50 0E CALL #CD50
```

This routine prints the "loading" message on the screen, but this should be noted that be "loaded", because the block has just been read in at this point of the code.

```
CD47 21 04 FF LD HL, #FF04
```

```
CD4A 7E LD A, (HL)
```

```
CD4B 23 INC HL
```

```
CD4C 3D DEC A
```

```
CD4D 20 FC JR NZ, #CD4B
```

```
CD4F 23 INC HL
```

```
CD50 23 INC HL
```

```
CD51 23 SC HL
```

```
CD52 23 INC HL
```

```
CD53 7E LD A, (HL)
```

```
CD54 08 INC HL
```

```
CD55 39 DEC HL
```

```
CD56 29 DEC HL
```

```
CD57 84 87 XOR #07
```

```
CD58 3C INC A
```

```
CD5A 32 15 FF LD (#FF15), A
```

```
CD5B 14 INC D
```

```
CD5C 69 JP (HL)
```

This routine starts off with HL as #FF04, then does a lot of sums, and comes out with a value in the HL register, which it jumps to after its loaded the block. This is what we need to look. So POKE CD5E with C3 and RANDOMIZE: USR 3246 - you'll find out it loads in one block and then stops. However, this isn't much use as you can't find out the value of the HL register. So put this routine somewhere, such as #FF00.

```
3200 CD 50 0E CALL #CD50
```

```
3203 22 10 58 LD (#5810), HL
```

```
3206 09 RET
```

This routine simply loads the first block, and puts the value of HL at #5810 so we can find out what it is from BASIC.

Now rewind the tape before the first Blueboard block again, and RANDOMIZE: USR 3206. When that's finished, type PRINT PEEK 33713=254*PEEK 33313. You should get the answer 65281, which is #FF00. Decipher this address.

```
FF00 C3 21 CD JP #CD21
```

This will go back and load the next block from tape. We can check it in the same way as the first by changing our routine at 3200.

```
3200 CD 50 0E CALL #CD50
```

```
3203 CD 21 CD CALL #CD21
```

```
3206 22 10 58 LD (#5810), HL
```

```
3209 09 RET
```

Now wind the tape back to the first Blueboard block again, RANDOMIZE: USR 3206 and start the tape. When the OK message comes up, type PRINT PEEK 33713=254*PEEK 33313, and you should get 45280 which is #FF00 too. Decipher this address.

```
FF00 C3 21 CD JP #CD21
```

This goes back and loads another block. By now, you might have guessed that the value of HL will always

contain the address of a JP #CD21 instruction - except for the last block, which will jump elsewhere. Now we can write a routine which will load any block as long as it jumps to #CD21 at the end. I'm getting the routine at #CCBC, because it's right next to the loading system, and hence is unlikely to be overloaded (although it could be, in which case we'd just put the routine elsewhere). The routine goes like this:

```
CCBC CD 00 CD CALL #CD00
```

This is just loading the first block.

```
CCCF CD 21 CD CALL #CD21
```

This loads in a block from tape.

```
CCF0 23 INC HL
```

```
CCF1 7E LD A, (HL)
```

```
CCF2 2B DEC HL
```

This routine loads the A register with the value of (HL+1).

This will be #01 if another block is to be loaded.

```
CCF3 FE 21 CP #21
```

```
CCF4 20 02 JR NZ, #CCF4
```

```
CCF5 08 FF JR #CCF5
```

This compares the value in the A register to 21. If there is no match, then the routine jumps to the end to preserve the value of HL, and to return to BASIC. Otherwise, it goes back to load another block.

```
CF5 22 FE CC LD (#CCFE), HL
```

```
CF6
```

This puts the value of HL in address #CF6, then returns to control of the disassembler.

Now, run this routine: RANDOMIZE: USR 32463, rewind to the last Blueboard block, and start loading. The program will now load blocks 00-2D, and return to control of the disassembler. The value at #CCFE is #FF00, so decipher this address:

```
FF00 C3 00 2E JP #5800
```

Now decipher #5800, which is the end point of the loading system:

```
5800 CD 25 7E PEEK IX
```

```
5802 CD 74 CD CALL #CD74
```

```
5805 CD 38 CE CALL #CD38
```

```
5808 24 07 JR 2, #5802
```

```
580B 06 00 LD B, #00
```

```
580D CD 64 CE CALL #CD64
```

```
5810 28 00 JR #5802
```

This routine loads in another block of code, and will jump to #812 when it has been successfully loaded.

```
812 F3 BE
```

```
813 81 POP HL
```

```
814 2E 00 LD L, #00
```

```
816 8B 5B 87 7E LD DE, (#7E87)
```

```
818 1A LD A, (#0E)
```

```
81B AC XOR (HL)
```

```
81D 28 INC H
```

```
81F AE XOR (HL)
```

```
821 2B DEC H
```

```
823 F1 LD (#DE), A
```

```
825 2C INC E
```

```
827 2C INC E
```

```
829 20 7E JR NZ, #82A
```

This routine is a decrypter, which decrypts some of the code we just loaded in from tape.

```
82F ED 5B 87 7E LD DE, (#7E87)
```

```
831 21 40 58 LD HL, #5840
```

```
833 1A LD A, (DE)
```

```

5002 88 300 00L
5003 77 LD 00L),A
5004 1C 100 E
5005 2C 100 L
5006 30 F0 JR HL,50020

```

This code decrypts some more code loaded in from tape, but it puts it at 50040, which is right in the middle of the code we are working on at the moment. So put a breakpoint at 50040 (the first instruction after the decrypter), and jump to 50000 (because we haven't executed any of the code from 50000 onwards yet).

```

5002 21 00 00 LD HL,50000
5003 30 30 0C LD (50000),HL
5004 7E 02 LD A,(002)
5005 30 00 0C LD (50000),A

```

This puts the value 0000 into 50000, but I'm not sure why, because 50000 is an unused system variable. It then changes the value of 50000 to 002, which is what it was originally before it was changed to protect the loader.

```

5006 2D 50 07 FE LD HL,(50000)
5007 2A 00 FE LD HL,(50000)
5008 1A LD A,(002)
5009 85 800 00L
500A 77 LD 00L),A
500B 23 100 HL
500C 1C 100 E
500D 20 F0 JR HL,50044
500E 3A 0C FE LA A,(50000)
500F 0C 0F E
5010 20 F0 JR HL,50044

```

This is another decrypter, which works in exactly the same way as the others.

```

5011 31 FE 00 LD SP,5000F
5012 30 00 07 LD HL,50000
5013 11 00 40 LD HL,50000
5014 01 00 1B LD HL,50000
5015 0D 00 LDIX
5016 31 00 0A LD HL,50000
5017 11 00 41 LD SP,50100
5018 01 00 10 LD HL,50000
5019 0D 00 LDIX

```

This code moves all the decrypted code to where it should be. This includes the loading screen (so you can see by the reference to 50000).

```

5020 3E 40 LD A,040
5021 30 00 50 LD (50000),A
5022 31 0F 14 LD HL,5100F
5023 22 01 50 LD (50001),HL
5024 31 0F 00 LD HL,5000F
5025 22 03 50 LD (50003),HL
5026 0D 00 FE CALL 50000

```

This code loads the next Basicload block, from 00 to 07, but will return to 507E when it's finished.

```

507E 21 00 40 LD HL,50000
5081 11 01 40 LD HL,50001
5084 30 00 LD 00L),0
5086 01 FF 1A LD HL,5100F
5089 0D 00 LDIX
508A 3E 44 LD A,044
508B 32 00 50 LD (50000),A
508C 31 0A 40 LD HL,5000A
508D 22 01 50 LD (50001),HL
508E 21 00 0A LD HL,50000
508F 22 03 0B LD (50003),HL
5090 0D 00 FE CALL 50000

```

This code loads out the screen and loads some code into it. Some Basicload games do not have this code, and it is only used in games where game code overwrites the loading system at 50000.

```

5091 21 00 40 LD HL,50000
5092 11 00 FA LD HL,50000
5093 01 00 04 LD HL,50000
5094 0D 00 LDIX

```

This moves the code loaded from the screen to 50000 (where it should be).

```

5095 3A 00 00 LD A,(50000)
5096 30 0C 50 LD (5000C),A
5097 31 07 01 LD SP,50107
5098 0D 00 03 CALL 50000
5099 20 10 JR 5,50005

```

This routine restores the value of 5000C that was stored in 50000 right at the very start. It then sets the stack to 50107, and calls the 0004 keyboard routine. If no key is pressed (and there shouldn't be), the routine jumps to 50D5. In fact, it then jumps there, otherwise it would attempt to load a normal foundation block, and there are none!

```

50D5 0D 0C F0 JR 5050C

```

This is what we've all been waiting for - the IF to the game itself! You can simply put FORKS at the end of 50D5, and follow them with a JP 5050C to load the game. For now, though, it might be a good idea to put the NEW routine up to 501A7 there, instead, and IF to 50E02 (where we left off). Then load the rest of the game, which will reset at the end, enabling you to load an STE, Dopey or whatever.

Now we've gone all the way through Basicload, perhaps we should write a back to the complete game. However, I'm going to put most of the back in machine code, rather than have long lines of decimal DATA statements. You should be able to convert the machine code into DATA statements and put a short program which reads them in and FORKS them into memory.

The only thing that has to be done from BASIC is the CLEAR, 50000 LOAD = CODE, 50400 from the BASIC loader. The machine code back will consist of the first routine we wrote, followed by a few patches to the main loading system, so that the IF to the game is overwritten with our FORKS. I'll be putting it at 50C00, because it's a safe place in memory.

```

50C00 3F 05 LD A,005
50C02 1F 14 05 LD (50C05),A

```

This puts a RST in place of the IF (HL) at 50C05 so we can CALL the loading system.

```

50C05 0D 00 00 CALL 50C00

```

This loads in the first Basicload block.

```

50C08 0D 01 00 CALL 50C01

```

This loads in another Basicload block.

```

50C0B 23 100 HL
50C0C 7E LD A,(00L)
50C0D 2B 100 HL
50C0E FF 01 0F 02 JR 002,50C04
50C0F 14 F4 JR 00C00

```

This checks to see if all the Basicload blocks have been loaded, and jumps ahead if they have, otherwise it jumps back to load the next block.

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